

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. *Applicant/Contact name and address:* Evanne Deines
9001 Duck Creek Rd.
Laurel, MT 59044
2. *Type of action:* Application for Beneficial Water Use Permit
3. *Water source name:* Duck Creek
4. *Location affected by project:* NESE and S2SENE Sec. 21, T2S, R25E Yellowstone County.
5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits:*
Evanne Deines is requesting a beneficial water use permit to divert 30 GPM flow up to 25.87 acre-feet per year from Duck Creek to use for livestock for 15 animal units, lawn and garden irrigation for 1/4 acre and irrigation on 9.5 acres in the S2SENE, W2NESE, NENESE, and SENWSE Sec. 21, T2S, R25E, Yellowstone County. The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.
6. *Agencies consulted during preparation of the Environmental Assessment:*
(include agencies with overlapping jurisdiction)

Montana Natural Heritage Program
Montana Department of Fish Wildlife & Parks (MFWP)
Montana Department of Environmental Quality (MDEQ)
Montana Bureau of Mines and Geology
United States Fish and Wildlife Service
United States Natural Resource and Conservation Service

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

Determination: Some impact

Duck Creek, tributary to the Yellowstone River is not on the DFWP list of chronically or periodically dewatered streams. Duck Creek is a non-perennial stream, the use of 30 GPM up to 25.87 AF/YR will likely increase the already non-perennial state of this source.

Water quality - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

Determination: No significant impact

Duck Creek, from the headwaters to the mouth is listed as water quality category 5 by DEQ. This category is for waters where one or more applicable beneficial uses are impaired or threatened and a TMDL is required to address the factors causing the impairment or threat. This source is listed as fully supporting agriculture, primary contact recreation and drinking water, and not fully supporting aquatic life. None of these beneficial uses is threatened. The proposed use of water for livestock, lawn and garden and irrigation would not impair water quality on this source.

Groundwater - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

Determination: No Impact

This use for livestock, lawn and garden and irrigation may increase groundwater recharge on the 9.75 acre proposed for irrigation. There should be no impact to groundwater quality due to this proposed use.

DIVERSION WORKS - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

Determination: No Significant Impact.

The proposed diversion would be a ½ to ¾ HP electric pump placed on the stream bank with a suction hose in the stream. Garden hoses would be used to deliver water to stock tanks for 10 horses. A network of garden hoses and sprinkler heads will be used to sprinkle irrigate 1/4 acre of lawn and garden and a Model E110 or similar travelling water reel will be used to irrigate 9.25 acres of pasture grass.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any “species of special concern,” or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or “species of special concern.”

Determination: No Impact

The Natural Heritage Program identified the following species of concern within the project area: Black-tailed Prairie Dog, Yellow-billed Cuckoo, Pinyon Jay, Sage Thrasher, Green-tailed Towhee, Spiny Softshell and Sauger. The State of Montana, Office of the Governor has issued Executive Order No. 12-2015 creating the Montana Sage Grouse Oversight Team and the Montana Sage Grouse Habitat Conservation Program. The proposed place of use does not fall within currently mapped sage grouse habitat. This property is active used for livestock and the lawn and garden and pasture are already in use. The use of Duck Creek water for livestock lawn and garden and irrigation on 9.75 acres should not affect any species of concern or create a barrier to the migration or movement of fish or wildlife.

Wetlands - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

Determination: No Impact

The project area is not within a wetland, so there should be no significant impacts to wetlands from this proposed use.

Ponds - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

Determination: No impact

There are no ponds associated with this water right application.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

Determination: No Impact

The soils in the proposed place of use are mostly Grail soils which are very clay loam, well drained, and non-saline to very slightly saline. The watering of livestock and sprinkle irrigation of 9.75 acre of lawn and garden and pasture should not degrade soil quality, alter stability or moisture content. There should be no saline seep from this use of water.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.

Determination: No Impact

This property is already planted in turf and pasture grass and has livestock on it. The land owner is expected to prevent the establishment or spread of noxious weeds on their property.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

Determination: No Impact

There should be no deterioration of air quality due to increased air pollutants from this proposed project.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

Determination: NA-project not located on State or Federal Lands.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

Determination: No Impact

There should be no significant impacts on other environmental resources of land, energy, and water from this proposed use.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

Determination: No Impact

This proposed use is not inconsistent with locally adopted environmental plans and goals for Yellowstone County.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

Determination: No Impact

The project is located on private land; this project should have no new impact on recreational or wilderness activities.

HUMAN HEALTH - Assess whether the proposed project impacts on human health.

Determination: No significant Impact

The project would have no impact on public health.

PRIVATE PROPERTY - Assess whether there are any government regulatory impacts on private property rights.

Yes___ No X If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: No significant impact.

OTHER HUMAN ENVIRONMENTAL ISSUES - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

Impacts on:

- (a) Cultural uniqueness and diversity? No significant impact.
- (b) Local and state tax base and tax revenues? No significant impact.
- (c) Existing land uses? No significant impact.
- (d) Quantity and distribution of employment? No significant impact.
- (e) Distribution and density of population and housing? No significant impact.
- (f) Demands for government services? No significant impact.
- (g) Industrial and commercial activity? No significant impact.
- (h) Utilities? No significant impact.
- (i) Transportation? No significant impact.
- (j) Safety? No significant impact.
- (k) Other appropriate social and economic circumstances? No significant impact.

2. Secondary and cumulative impacts on the physical environment and human population:

Secondary Impacts None identified.

Cumulative Impacts There are no other pending applications on this source of water.
There should be no significant cumulative impacts.

3. Describe any mitigation/stipulation measures: There are no mitigation or stipulation

measures required.

4. ***Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:*** The reasonable alternatives are to grant the application, to advise the Applicant to propose a different application or the no action alternative. Granting the application would allow the Applicant to water livestock and 9.75 acres of turf and pasture grass on her property. It may be possible for the Applicant to develop an alternate source of water, such as a spring or well, or abandon the proposal. The no action alternative would prevent the Applicant from using Duck Creek for her livestock and irrigation.

PART III. Conclusion

1. ***Preferred Alternative*** To authorize the beneficial water use permit.

2. ***Comments and Responses***

3. ***Finding:***

Yes ___ No X Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: No significant environmental impacts were identified. No EIS required.

Name of person(s) responsible for preparation of EA:

Name: Christine Schweigert

Title: Water Resources Specialist

Date: September 28, 2017